

**MISSOURI DEPARTMENT OF TRANSPORTATION  
GENERAL SERVICES- PROCUREMENT  
DISTRICT 6, 2309 BARRETT STATION RD,  
BALLWIN, MO 63021**

REQUEST NO.	SL13-037-RW
DATE	October 26, 2012
PAGE NO.	1
NO. OF PAGES	32

SEALED BIDS, SUBJECT TO THE ATTACHED CONDITIONS WILL  
BE RECEIVED AT THIS OFFICE UNTIL

**10:00 a.m., Local Time, November 19, 2012**

AND THEN PUBLICLY OPENED AND READ FOR FURNISHING  
THE FOLLOWING SUPPLIES OR SERVICES.

**BIDS TO BE BASED F.O.B. MISSOURI DEPARTMENT OF  
TRANSPORTATION**

Submit net bid as cash discount stipulations will not be considered

THE BIDDER MUST SIGN AND RETURN BEFORE DATE AND TIME SET FOR OPENING.

**BUYER:** Teresa(Terri) Mount  
**BUYER EMAIL:**  
Teresa.Mount@modot.mo.gov

**BUYER TELEPHONE:** 314-301-1431  
**BUYER FAX:**  
**573-526-0016**

**SUPPLIES OR SERVICES**

**Permanent Soil Nail Installation to Repair Retaining Wall**

**COMPLETION DATE: On or Before April 1, 2013**

Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBES. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.

**Components of Agreement:** The Agreement between MHTC and the successful Bidder shall consist of: the RFB and any written amendments thereto, the "Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions" that are attached to this RFB, the bid submitted by the Bidder in response to the RFB and the post-award contract agreement signed between the parties. However, MHTC reserves the right to clarify any relationship in writing and such written clarification shall govern in case of conflict with the applicable requirements stated in the RFB or the Bidder's bid. The Bidder is cautioned that its bid shall be subject to acceptance by MHTC without further clarification.

**Return sealed bid to the address shown at the top of this page.**

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**(SEE ATTACHED FOR TERMS, CONDITIONS, AND INSTRUCTIONS)**

*In compliance with the above Request For Bid, and subject to all conditions thereof, the undersigned bidder agrees to furnish and deliver any or all the items on which prices were bid within the timeframe specified herein, after receipt of*

**Date:** \_\_\_\_\_  
**Telephone No.:** \_\_\_\_\_  
**Fax No.:** \_\_\_\_\_  
**Federal I.D. No.** \_\_\_\_\_  
**Email Address:** \_\_\_\_\_

**Firm Name:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
\_\_\_\_\_  
**By (Signature):** \_\_\_\_\_  
**Type/Print Name** \_\_\_\_\_

**Is your firm MBE  
certified?** ☐ Yes ☐ No  
Form E-103 (Rev. 11-04)

**Title:** \_\_\_\_\_  
**Is your firm WBE  
certified?** ☐ Yes ☐ No

## INTRODUCTION AND GENERAL INFORMATION

### 1.1 Introduction:

- 1.1.1 This Request For Bid seeks bids from qualified organizations to design and construct a permanent soil nail installation to reinforce existing walls at the locations shown on the plans and in accordance with terms and specifications of this RFB.

Each bid must be mailed or hand delivered in a sealed envelope to Ms Teresa (Terri) Mount, Procurement Unit, Operations Complex, 2309 Barrett Station Rd., Ballwin, Mo. 63021.

All questions regarding the RFB shall be submitted to Ms. Teresa (Terri) Mount. Bids must be returned to the office of Ms. Mount no later **than 10:00 a.m., Local Time November 19, 2012.**

#### **RFB Coordinator:**

**Ms. Teresa (Terri) Mount Sr. Procurement Agent  
Missouri Department of Transportation  
2309 Barrett Station Road, Ballwin, MO. 63021**

**PHONE: 314-301-1431  
FAX: 573-522-0016  
EMAIL: Teresa.Mount@modot.mo.gov**

## **1.2 General Information:**

This document constitutes an invitation for competitive, sealed bids for the procurement of services to design and construct a soil nail installation for retaining wall repair as specified in these provisions.

1.2.1 Organization - This document, referred to as a Request for Bid (RFB), is divided into the following parts:

- 1) Introduction and General Information
- 2) Scope of Work (Exhibit B)
- 3) Bid Submission
- 4) Pricing Page(s)
- (5) Exhibit (A & C)
- (6) Terms and Conditions

1.2.2 This document contains requirements related to the newly revised statute.

Effective January 1, 2009 and pursuant to RSMo 285.530 (1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. Additional specific information is included herein.

<http://www.moga.mo.gov/statutes/C200-299/2850000530.HTM>

E-Verify is an example of a federal work authorization program. For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is available at:

[http://www.dhs.gov/files/programs/gc\\_1185221678150.shtm](http://www.dhs.gov/files/programs/gc_1185221678150.shtm)

**SCOPE OF WORK**  
**SL13-037-RW**

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SCOPE OF WORK  
SL13-037-RW – Exhibit B

2.1 General Requirements:

- 2.1.1 The contractor shall provide design and construction of a permanent soil nail installation to reinforce existing walls at the locations shown on plans as specified for the Missouri Highway and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT), in accordance with the provisions and requirements stated herein.
- 2.1.2 The contractor shall provide all deliverables/services to the sole satisfaction of MoDOT.
- 2.1.3 Unless otherwise specified herein, the contractor shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.

2.2 Miscellaneous Contract Requirements and Specification:

**A. Work Location**

Route I-55, Retaining wall on 3<sup>rd</sup> Street between Gratiot and Cedar  
St Louis City  
Work Location is shown in Exhibit A of the contract documents

**B. Work Description**

**1.1 Scope of work.** This work consists of designing and constructing a permanent soil nail installation to reinforce existing walls at the locations shown on the plans. The Contractor shall furnish all labor, plans, drawings, design calculations and all other material and equipment required to design and construct the soil nail installation in accordance with the plans and this Specification. Soil nail design shall be based on the assumption that the existing wall system is present but is not functional in providing horizontal wall support. The existing wall stem shall be re-used as the facing for the new soil nail wall.

**1.2** The current wall is leaning and it is **not** the intent of this project to pull the wall back to its original plane. The design of the soil nail wall reinforcement shall be suitable to prevent further rotation of the wall.

**C. Project Contact for Contractor**

All questions concerning this project during the construction process shall be forwarded to the designated MoDOT engineer upon award of the project.

**1.0** In addition, the contractor shall contact the project engineer at least 5 working days prior to beginning work.

**D. Tabulation of Quantities**

Soil Nail Wall

Form Liners for Soil Nail Wall System  
Concrete and Masonry Protection System  
1 Test Nail

Total Work Performed, Soil Nail Wall System = 1 Lump Sum

#### **E. Traffic Control**

All traffic control will be provided by MoDOT forces. The contractor shall contact Rick Schnieder, at 314-954-0412, at least 7 days prior to starting all construction activities to coordinate operations. Standard MUTCD compliant signs, channelizers, arrow boards, truck mounted attenuators, etc. will be used. MoDOT will obtain all necessary permits from the City of St Louis to perform this work on 3<sup>rd</sup> Street.

#### **F. Working Hours**

**1.0** Working hours shall be from **8:00 am Monday morning to 8:00pm Friday evening**. Additional working hours to be approved by the Engineer.

**2.0** Due to the church located on 3<sup>rd</sup> Street across from the project location, the contractor shall be prepared to remove all equipment and open the road for access to the church for services as requested by the Engineer.

#### **G. Completion Date and Working Days**

**1.0 Description.** Completion of the work will be administered on both a calendar date completion basis and on a working days completion basis.

**1.1** Regardless of when the contractor begins the work, all work shall be completed on or before the calendar date of Tuesday, **April 1, 2013**.

**1.2** Regardless of when the contractor begins the field work, all field work shall be completed within **20** working days. The test nail and design of the soil nail wall system are excluded from this time period. If the contractor fails to complete the work within the days allowed, then liquidated damages in the amount of **\$300** per day will apply. Days that the Department has suspended the contractor's work will not be assessed liquidated damages.

#### **2.0 Administration of Calendar Completion Date and Working Days Completion.**

**2.1 Calendar Day.** A calendar day will be defined as any day of the year including holidays, Saturdays, and Sundays.

**2.1.1** The contractor will not be entitled to any extension of calendar days because of unsuitable weather conditions or the effects of weather conditions unless authorized in writing by the engineer. Calendar days allowed for the performance of the work may be extended for delays caused by acts of God, acts of the public enemy, fires, floods, earthquakes, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or other delays not caused by the contractor's fault or negligence. An extension of the calendar completion date will only be granted to the contractor provided documentation has been given to the engineer.

**2.2 Working Day.** A working day will be defined as any day when, in the judgment of the engineer, weather conditions would permit the major operation of the project for five hours or more, unless other unavoidable

conditions prevent the contractor's operations. If conditions require the contractor to stop work in less than five hours, the day will not be counted as a working day. Saturdays, Sundays, and holidays established by law will not be counted as working days.

**2.2.1** The count of working days will start on the date the contractor starts construction operations. The engineer will determine when a working day is to be charged. The engineer may make allowance for working days lost due to causes justifying their elimination from the count of working days. No allowance will be made for delay or suspension of the work due to fault of the contractor.

## **H. Liquidated Damages for Failure to Complete Work on Time**

**1.0** If the contractor fails to complete the work by the calendar date, or working days specified in Section G above, then liquidated damages in the amount of **\$700.00** per day will apply. Days that the Department has suspended the contractor's work will not be assessed liquidated damages. Regardless of when the contractor begins the work, all work shall be completed within **20** working days. If the contractor fails to complete the work within the days allowed, then liquidated damages in the amount of **\$300** per day.

**1.1** The contractor shall agree and understand that providing the repair to the retaining wall is in accordance with the requirements stated herein is considered critical to the efficient operations of MoDOT. However, since the amount of actual damages would be difficult to establish in the event the contractor fails to comply with the contractual requirements, the contractor shall agree and understand that the amount identified below as liquidated damages shall be reasonable and fair under the circumstances.

**1.2** If the contractor does not complete the entirety of work outlined in this contract as specified in Section G above, the Commission, the traveling public, and state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages specified in the amount indicated above per day for each full day that each of the work is not complete and open to traffic in excess of the limitation as specified elsewhere in this special provision.

a. The contractor shall further agree and understand that such liquidated damages shall either be deducted from the total amount due the contractor or paid by the contractor as a direct payment to MoDOT, at the sole discretion of MoDOT.

b. The contractor shall agree and understand that the liquidated damages described herein shall not be construed as a penalty.

1. The contractor shall agree and understand that all assessments of liquidated damages shall be within the discretion of MoDOT and shall be in addition to, not in lieu of, the rights of the MoDOT to pursue other appropriate remedies.

## **I. Soil Nail Retaining Wall System**

### **1.0 Materials**

### **1.1 Soil Nails**

- a. Nail Solid Bar. AASHTO M31/ASTM A615, Grade 60 or 75. Deformed bar, continuous without splices or welds, new, straight, undamaged, bare, or epoxy coated, or encapsulated as required to meet the design and corrosion protection requirements. Threaded, a minimum of 6 in. on the wall anchorage end, to allow proper attachment of bearing plate and nut. Threading may be continuous spiral deformed ribbing provided by the bar deformations (continuous thread bars) or may be cut into a reinforcing bar. If threads are cut into a reinforcing bar, provide the next-larger bar number designation from what is required by design, at no additional cost.
- b. Bar Coupler. Bar couplers shall develop the full ultimate tensile strength of the bar as certified by the manufacturer.
- c. Fusion Bonded Epoxy Coating. ASTM A 775. Minimum 0.016 in. thickness electrostatically applied. Bend test requirements are waived. Coating at the wall anchorage end of epoxy-coated bars may be omitted over the length provided for threading the nut against the bearing plate.
- d. Encapsulation. Minimum 0.04-in. thick, corrugated, HDPE tube conforming to AASHTO M252 or corrugated PVC tube conforming to ASTM D1784, Class 13464-B.

## **1.2 Soil Nail Appurtenances**

- a. Centralizer. Manufactured from Schedule 40 PVC pipe or tube, steel, or other material not detrimental to the nail steel (wood shall not be used); securely attached to the nail bar; sized to position the nail bar within 1 in. of the center of the drillhole; sized to allow tremie pipe insertion to the bottom of the drillhole; and sized to allow grout to freely flow up the drillhole.
- b. Nail Grout. Neat cement or sand/cement mixture with a minimum 3-day compressive strength of 1,500 psi and a minimum 28-day compressive strength of 3,000 psi, per AASHTO T106/ASTM C109.
- c. Fine Aggregate. AASHTO M6/ASTM C33.
- d. Portland Cement. AASHTO M85/ASTM C150, Type I, II, III, or V.
- e. Admixtures. AASHTO M194/ASTM C494. Admixtures that control bleed, improve flowability, reduce water content, and retard set may be used in the grout subject to review and acceptance by the engineer. Accelerators are not permitted. Expansive admixtures may only be utilized in grout used for filling sealed encapsulations. Admixtures shall be compatible with the grout and mixed in accordance with the manufacturer's recommendations.
- f. Film Protection. Polyethylene film per AASHTO 71.

## **1.3 Bearing Plates and Nuts**

- a. Bearing Plates. AASHTO M183/ASTM A36.
- b. Nuts. AASHTO M291, grade B, hexagonal, fitted with beveled washer or spherical seat to provide uniform bearing.

## **1.4 Concrete Cap**

- a. Concrete. Class B.



- b. Reinforcing Steel. Grade 60.

## **2.0 Contractor Qualifications**

**2.1** The soil nailing contractor shall have completed at least 3 permanent soil nail retaining wall projects during the past 3 years totaling at least 10,000 ft<sup>2</sup> of wall face area and at least 500 permanent soil nails.

**2.2** Provide a Missouri Registered Professional Engineer, employed or retained by the soil nail contractor, with experience in the design and construction of permanent soil nail retaining walls on at least 3 completed projects over the past 3 years to perform the design and supervise the work. The contractor shall not use consultants or manufacturer's representatives to meet the requirements of this section. Provide on-site supervisors and drill operators with experience installing permanent soil nails on at least three projects over the past 3 years.

**3.0 Soil Nail Wall Design Requirements** Design the soil nail wall using the Allowable Stress Design (ASD) method, also known as Service Load Method (SLD), as outlined in FHWA Report No. FHWA0-IF-03-017, titled Geotechnical Engineering Circular No. 7, "Soil Nail Walls." Soil/Rock design shear strength parameters, slope and external surcharge loads, seismic design coefficient, type of wall facing, architectural treatment, corrosion protection requirements, easements, and right-of-ways will be as shown on the plans and required by this Specification. Evaluation of global stability for the temporary construction conditions, including adjacent wall construction, and permanent wall condition shall be the responsibility of the soil nail wall designer.

**3.1** Concrete caps shall be constructed to protect the soil nail heads. Caps shall be sufficient to cover all parts of the soil nail wall with minimum 1.5" cover to all parts and reinforcement. The top of the soil nail wall shall be sloped to discourage climbing of the caps. The contractor may propose other means to protect the soil nail heads to be approved by the Engineer.

## **4.0 Submittals**

**4.1** At least 45 calendar days before the planned start of the soil nail work, submit six complete sets of design calculations and working drawings to the Engineer for review and approval. Include all details, dimensions, quantities, ground profiles and cross-sections necessary to construct the wall. Verify the limits of the wall and ground survey data before preparing the drawings. The working drawings shall be prepared to the MoDOT standards. The drawings and calculations shall be signed, sealed and stamped by a registered Professional Engineer in the state of Missouri and in accordance with Authenticity of Certain Document in Sec 107. The engineer will approve or reject the contractor's submittals within 10 calendar days after the receipt of the complete submission. The contractor will not begin construction or incorporate materials into the work until the submittal requirements are satisfied and found acceptable to the engineer.

**4.2** At least 45 calendar days before starting soil nail work, the contractor shall submit a brief description of at least 3 similar soil nail wall projects completed within the past 3 years, including the owning agency's name, address, and current phone number; location of project; project contract value; and scheduled completion date and actual completion date for the project.

**4.3** The submittal shall also identify the engineer, on-site supervisors, and drill operators assigned to the project, and submit a summary of each individual's experience. Only those individuals designated as meeting the qualifications requirements shall be used for the project. The contractor cannot substitute for any of these individuals without written approval of the engineer. The engineer shall approve or reject the contractor qualifications and staff within 28 calendar days after receipt of the submission. Work shall not be started on any soil nail wall nor materials ordered until the contractor's qualifications have been approved by the engineer. The engineer may suspend the work if the contractor substitutes unqualified personnel for approved personnel during

construction. If work is suspended due to the substitution of unqualified personnel, the contractor shall be fully liable for additional costs resulting from the suspension of work and no adjustment in contract time resulting from the suspension of the work will be allowed.

**4.4** The contractor is responsible for providing the necessary survey and alignment control during the installation of the soil nails, locating drillholes and verifying limits of wall installation. At least 45 calendar days before starting soil nail work, submit a Construction Plan to the engineer that includes the following:

- a. The start date and proposed detailed wall construction sequence.
- b. Drilling and grouting methods and equipment, including any variation of these along the wall alignment.
- c. Nail grout mix design, including compressive strength test results (per AASHTO T106/ASTM C109) supplied by a qualified independent testing lab verifying the specified minimum 3-day and 28-day grout compressive strengths. Previous test results for the same grout mix completed within one year of the start of grouting may be submitted for verification of the required compressive strengths.
- d. Nail grout placement procedures and equipment.
- e. Soil nail test program design, test methods, equipment setup, and reporting procedures.
- f. Identification number and certified calibration records for each test jack and pressure gauge and load cell to be used. Jack and pressure gauge shall be calibrated as a unit. Calibration records shall include the date tested, the device identification number, and the calibration test results and shall be certified for an accuracy of at least 2 percent of the applied certification loads by a qualified independent testing laboratory within 90 days prior to submittal.
- g. Manufacturer Certificate of Compliance for the soil nail bar ultimate strength, nail bar steel, Portland cement, centralizers, bearing plates, epoxy coating, and encapsulation.

**4.5** The engineer shall approve or reject the contractor's Construction Plan within 28 calendar days after the submission. Approval of the Construction Plan does not relieve the contractor of his responsibility for the successful completion of the work.

**5.0 Storage and Handling** Store and handle soil nail bars in a manner to avoid damage or corrosion. Replace bars exhibiting abrasions, cuts, welds, weld splatter, corrosion, or pitting. Repair or replace any bars exhibiting damage to encapsulation or epoxy coating. Repaired epoxy coating areas shall have a minimum 0.016 in. thick coating.

**6.0 Nail Installation** Provide nail length and drillhole diameter necessary to develop the load capacity to satisfy the acceptance criteria for the design load required. Drillholes for the soil nails at the locations, elevations, orientations, and lengths shown on the approved working drawings. Select drilling equipment and methods suitable for the ground conditions and in accordance with the accepted installation methods submitted by the contractor. The use of drilling muds or other fluids to remove cuttings will not be allowed. If caving ground is encountered, use cased drilling methods to support the sides of the drillholes. The use of self-drilling nail bars (also known as hollow, self-grouting or pressure-grouted nail bars) will not be allowed. Provide nail bars as shown in the working drawings. Provide centralizers sized to position the bar within 1 in. of the center of the drillhole. Position centralizers as shown on the working drawings so that their maximum center-to-center spacing does not exceed 8.2 ft. Also locate centralizers within 1.5 ft. from the top and bottom of the drillhole.

## 7.0 Grouting

**7.1** Grout the drillhole after installation of the nail bar and within 2 hours of completion of drilling. Inject the grout at the lowest point of each drillhole through a grout tube, casing, hollow-stem auger, or drill rods. Keep the outlet end of the conduit delivering grout below the surface of the grout as the conduit is withdrawn to prevent the creation of voids. Completely fill the drillhole in one continuous operation. Cold joints in the grout column are not allowed except at the top of the test bond length of proof tested production nails.

**7.2** Test nail grout according to AASHTO T106/ASTM C109 at a frequency of one test per mix design and minimum of one test for every 10 cy of grout placed and at least one test per crew shift. Provide grout cube test results to the engineer within 24 hours of testing.

## 8.0 Nail Testing

**8.1** Design and perform both verification and proof testing of designated test nail. Perform 1 (one) verification test on sacrificial test nail on a wall panel adjacent to Wall Panel No. 9 as approved by the Engineer. Perform proof tests on production nails at locations selected by the engineer. Testing of any nail shall not be performed until the nail grout has cured for at least 72 hours or attained at least its specified 3-day compressive strength. After completion of the testing, the hole in the existing wall shall be repaired to the satisfaction of the Engineer.

**8.2** Testing equipment shall include 2 dial gauges, dial gauge support, jack and pressure gauge, electronic load cell, and a reaction frame. The pressure gauge shall be graduated in 75 psi increments or less. Measure the nail head movement with a minimum of 2 dial gauges capable of measuring to 0.001 in.

## 9.0 Verification Testing of Sacrificial Nail

**9.1** Perform verification testing prior to installation of production nails to confirm the appropriateness of the contractor's drilling and installation methods, and verify the required nail pullout resistance.

**9.2** Verification test nail shall have both bonded and unbonded lengths. Along the unbonded length, the nail bar is not grouted. The unbonded length of the test nail shall be at least 3 ft. The bonded length of the solid nail during verification tests,  $L_{BVT}$ , shall be at least 10.0 ft., but not longer than a maximum length,  $L_{BVT \max}$ , such that the nail load does not exceed 90 percent of the nail bar tensile allowable load during the verification test. Therefore, the following requirements shall be met:

$$10 \text{ ft} \leq L_{BVT} < L_{BVT \max}$$

The length  $L_{BVT \max}$  is defined as:

$$L_{BVT \max} = \frac{C_{RT} \times A_t \times f_y}{Q_{ALL} \times FS_{Tver}}$$

where,

$C_{RT}$  = Reduction coefficient. Use  $C_{RT} = 0.9$  for Grade 60 and 75 bars;

$A_t$  = Nail bar cross sectional area;

$f_y$  = Nail bar yield tensile strength;

$Q_{ALL}$  = Allowable pullout resistance per unit length ( $Q_{ALL} = Q_u / FS_p$ ), as specified herein or in working drawings; and

$FS_{Tver}$  = Factor of safety against tensile failure during verification tests (use 3.0)

**9.3** The maximum bonded length shall be preferably based on production nail maximum bar grade. Provide larger bar sizes, if required to meet the 10-ft. minimum test bonded length requirement at no additional cost.

The Design Test Load (DTL) shall be determined as follows:

$$DTL = L_{BVT} \times Q_{ALL}$$

DTL shall be calculated based on as-built bonded lengths.

**9.4** Perform verification tests by incrementally loading the verification test nail to failure or a maximum test load of 300 percent of the DTL in accordance with the following loading schedule. Record the soil nail movements at each load increment.

Load	Hold Time
0.05 DTL max. (AL)	1 minutes
0.25 DTL	10 minutes
0.50 DTL	10 minutes
0.75 DTL	10 minutes
1.00 DTL	10 minutes
1.25 DTL	10 minutes
1.50 DTL (Creep Test)	60 minutes
1.75 DTL	10 minutes
2.00 DTL	10 minutes
2.50 DTL	10 minutes max.
3.0 DTL or Failure	10 minutes max.
0.05 DTL max. (AL)	1 minute (record permanent set)

**9.5** The alignment load (AL) shall be the minimum load required to align the testing apparatus and shall not exceed 5 percent of the DTL. Dial gauges shall be set to "zero" after the alignment load has been applied. Following application of the maximum load (3.0 DTL) reduce the load to the alignment load (0.05 DTL maximum) and record the permanent set.

**9.6** Hold each load increment for at least 10 minutes. Monitor the verification test nail for creep at the 1.50 DTL load increment. Measure and record nail movements during the creep portion of the test in increments of 1 minute, 2, 3, 5, 6, 10, 20, 30, 50, and 60 minutes. Maintain the load during the creep test within 2 percent of the intended load by use of the load cell.

**9.7** Leave in place acceptable sacrificial test nail.

## **10.0 Proof Testing of Production Nails**

**10.1** Perform successful proof testing on no less than 5 percent of the production soil nails in each nail row or a minimum of 1 per row, whichever is greater. The engineer shall determine the locations and number of proof tests prior to nail installation in each row. Production proof test nails shall have both bonded and temporary unbonded lengths. The temporary unbonded length of the test nail shall be at least 3.0 ft. The bonded length of the soil nail during proof production test,  $L_{BPT}$ , shall be at least 10 ft. and at maximum length,  $L_{BPT \max}$ , the bonded length shall be such that the nail load does not exceed 90 percent of an allowable value of the nail bar tensile load during the proof production test. Therefore, the following requirements shall be met:

$$10 \text{ ft} \leq L_{BPT} < L_{BPT \max}$$

The length  $L_{BPT\ max}$  is defined as:

$$L_{BPT\ max} = \frac{C_{RT} \times A_t \times f_y}{Q_{ALL} \times FS_{Tproof}}$$

where,

$C_{RT}$  = Reduction coefficient. Use  $C_{RT} = 0.9$  for Grade 60 and 75 bars;

$A_t$  = Nail bar cross sectional area;

$f_y$  = Nail bar yield tensile strength;

$Q_{ALL}$  = Allowable pullout resistance per unit length ( $Q_{ALL} = Q_u/FS_p$ ), as specified herein or in working drawings; and

$FS_{Tproof}$  = Factor of safety against tensile failure during proof production tests (use 1.5)

**10.2** The maximum bonded length shall be based on production nail maximum bar grade. Production proof test nails shorter than 12 ft. in length may be constructed with less than the minimum 10-ft. bond length.

The Design Test Load (DTL) shall be determined as follows:

$$DTL = L_{BPT} \times Q_{ALL}$$

DTL shall be calculated based on as-built bonded lengths

**10.3** Perform proof tests by incrementally loading the proof test nail to 150 percent of the DTL in accordance with the following loading schedule. Record the soil nail movements at each load increment.

#### Proof Test Loading Schedule

Load	Hold Time
0.05 DTL max. (AL)	Until Movement Stabilizes
0.25 DTL	Until Movement Stabilizes
0.50 DTL	Until Movement Stabilizes
0.75 DTL	Until Movement Stabilizes
1.00 DTL	Until Movement Stabilizes
1.25 DTL	Until Movement Stabilizes
1.50 DTL (Max. Test Load)	Creep Test (see below)

**10.4** The alignment load (AL) shall be the minimum load required to align the testing apparatus and shall not exceed 5 percent of the DTL. Dial gauges shall be set to "zero" after the alignment load has been applied.

**10.5** The creep period shall start as soon as the maximum test load (1.50 DTL) is applied and the nail movement shall be measured and recorded at 1 minute, 2, 3, 5, 6, and 10 minutes. Where the nail movement between 1 minute and 10 minutes exceeds 0.04 in., maintain the maximum test load for an additional 50 minutes and record movements at 20 minutes, 30, 50, and 60 minutes. Maintain all load increments within 5 percent of the intended load.

## 11.0 Test Nail Acceptance Criteria

**11.1** A test nail shall be considered acceptable when all of the following criteria are met:

- a. For verification tests, the total creep movement is less than 0.08 in. between the band 60-minute readings and the creep rate is linear or decreasing throughout the creep test load hold period.
- b. For proof tests, the total creep movement is less than 0.04 in. during the 10-minute readings or the total creep movement is less than 0.08 in. during the 60-minute readings and the creep rate is linear or decreasing throughout the creep test load hold period.
- c. For verification and proof tests, the total measured movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the test nail unbonded length.
- d. A pullout failure does not occur at 3.0 DLT under verification testing and 1.5 DTL test load under proof testing. Pullout failure is defined as the inability to further increase the test load while there is continued pullout movement of the test nail. Record the pullout failure load as part of the test data.

**11.2** Maintaining stability of the temporary unbonded test length for subsequent grouting is the Contractor's responsibility. If the unbonded test length of production proof test nails cannot be satisfactorily grouted subsequent to testing, the proof test nail shall become sacrificial and shall be replaced with an additional production nail installed at no additional cost to the owner.

## **12.0 Test Nail Rejection**

**12.1** If a test nail does not satisfy the acceptance criterion:

- a. For verification test nail, the contractor's engineer shall evaluate the results of the verification test and provide recommendations for the engineer for review. Installation methods that do not satisfy the nail testing requirements shall be rejected. The contractor shall propose alternative methods and install replacement verification test nails. Replacement test nails shall be installed and tested at no additional cost.
- b. For proof test nail, the contractor's engineer shall evaluate the results of each proof test and provide recommendations to the Engineer for review. The engineer may require the contractor to replace some or all of the installed production nails between a failed proof test nail and the adjacent passing proof test nail. Alternatively, the engineer may require the installation and testing of additional proof test nails to verify that adjacent previously installed production nails have sufficient load carrying capacity. Installation and testing of additional proof test nails or installation of additional or modified nails as a result of proof test nail failure(s) will be at no additional cost.

**13.0 Acceptance** Material for the soil nail retaining wall will be accepted based on the manufacturer production certification or from production records. Construction of the soil nail retaining wall will be accepted based on visual inspection and the relevant production testing records.

**14.0 Method of Measurement.** No measurement will be made.

**15.0 Basis of Payment.** The work described above will be considered completely covered under the contract lump sum price for "Soil Nail Wall System".

## **J. Construction Requirements**

**1.0 Description.** This provision contains general construction requirements for this project.

**2.0 Construction Requirements.** Plans for the existing structure(s) are included in the contract with the bridge plans for informational purposes only.

**2.1** Traffic control shall be in accordance with the contract documents.

**2.1.1** In order to assure the least traffic interference, the work shall be scheduled so that a lane closure is for the absolute minimum amount of time required to complete the work. A lane shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

**2.2** Provisions shall be made to prevent any debris and materials from falling onto the roadway. Any debris and material that falls outside the limits mentioned previously and if determined necessary by the engineer, shall be removed as approved by the engineer at the contractor's expense.

**2.3** Any damage sustained to remaining structures as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

**2.4** Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

**3.0 Storage of Materials.** The contractor may have use of the Broadway Maintenance facility to store equipment and materials used for this project. The contractor shall contact Rick Schnieder, at 314-954-0412, to coordinate access and location at least 7 days prior to needing the area.

**4.0 Method of Measurement.** No measurement will be made.

**5.0 Basis of Payment.** Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

## **K. Utilities**

For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

<b><u>Utility Name</u></b>	<b><u>Known Required Adjustment</u></b>	<b><u>Type</u></b>
Mr. Les Nolan <b>AmerenUE (Distribution- Underground)</b> 1540 Gratiot St. P.O. Box 66149, MC-678 St. Louis, MO 63166-6149 Telephone(314) 554-4662 Email: <a href="mailto:lnolan@ameren.com">mailto:lnolan@ameren.com</a>	None	Power
Mr. Doug Lampert <b>AT&amp;T (Distribution)</b> 13075 Manchester Road 3WQ3 Des Peres, MO 63131	None	Communication

Telephone: (314) 957-3748 Email: <a href="mailto:dl6728@att.com">dl6728@att.com</a>		
Mr. Cory Birk <b><u>Charter Communications</u></b> 815 Charter Commons Chesterfield, MO 63017 Telephone: (636) 387-6641 Email: <a href="mailto:Cory.Birk@chartercom.com">Cory.Birk@chartercom.com</a>	None	Communication
Mr. Glenn Payne <b><u>City of St. Louis-Lighting Division</u></b> 1900 Hampton St. Louis, Missouri 63139 Telephone: 314-647-3111 Ext. 1108 Email: <a href="mailto:payneg@stlouiscity.com">payneg@stlouiscity.com</a>	None	Lighting
Mr. Mark Nankivil <b><u>City of St. Louis- Water Division</u></b> 4600 McRee St. Louis, Missouri 63110 Telephone: 314-633-9023 Email: <a href="mailto:mnankivil@stlwater.com">mnankivil@stlwater.com</a>	None	Water
Ms. Lan Le Lam <b><u>Laclede Gas</u></b> 3950 Forest Park Avenue St. Louis, Missouri 63108 Telephone: (314) 658-8495 Email: <a href="mailto:llam@lacledegas.com">llam@lacledegas.com</a>	None	Gas
Mr. Don Torbett <b><u>MCI/Verizon</u></b> 6829 North Lakewood MD 2.2-408A Tulsa, OK 74117 Phone: 918-269-4698 Email: <a href="mailto:donald.torbett@verizonbusiness.com">donald.torbett@verizonbusiness.com</a>	None	Communication
Mr. Francis Kaiser <b><u>Metropolitan St. Louis Sewer District</u></b> 2350 Market Street St. Louis, Missouri 63103-2555 Telephone: 314-768-6204	None	Sanitary and Sewer
Mr. Jason Johns <b><u>Lightcore, A Century Tel Company</u></b> 16141 Swingley Ridge Road, Suite 200 Chesterfield, MO 63017 Telephone: 916-296-8520 Email: <a href="mailto:Jason.Johns@CenturyLink.com">Jason.Johns@CenturyLink.com</a>	None	Communication



**1.1** The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

**1.2** The contractor agrees that any effects of the presence of the utilities, their relocation, contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in the work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay as provided in Section 105.7.3. The contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the contractor, its subcontractors and suppliers in any claim or action arising out of or in relation to the work under the contract.

**1.3** The contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The contractor shall hold and save harmless the Commission from damages to any utility facilities interruption of service by it or its subcontractor's operation.

**2.0** It shall be noted by the contractor that MoDOT is a member of Missouri One Call (800 Dig Rite). Some work on this project may be in the vicinity of MoDOT utility facilities, which includes but is not limited to traffic signal cables, highway lighting circuits, ITS cables, cathodic protection cables, etc. Prior to beginning work, the contractor shall request locates from Missouri One Call. The contractor shall also complete the Notice of Intent to Perform Work form located at the Missouri Department of Transportation website:

<http://www.modot.mo.gov/asp/intentToWork.shtml>

The contractor shall submit the form over the web (preferred method) or by fax to the numbers on the printed form. The notice must be submitted a minimum of 2 and a maximum of 10 working days prior to excavation just as Missouri One Call requires.

#### **L. Invoicing and Payment Requirements:**

**1.0** The contractor shall submit an itemized invoice to the following address after the completion of deliverables, as specified herein.

Missouri Department of Transportation  
Business & Benefits  
1590 Woodlake  
Chesterfield, MO. 63017-5712

**2.0** Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.

- 3.0 The contractor shall be paid in accordance with the firm, fixed prices stated on the pricing page(s) of this document after completion of deliverables specified herein and acceptance by MoDOT.
- 4.0 Other than the payment specified above, no other payments or reimbursements shall be made to the contractor for any reason whatsoever.
- 5.0 MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Federal Excise Tax Exemption Certificate will be furnished to the successful bidder upon request.
- 6.0 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- 7.0 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the contractor's expense.
- 8.0 Notarized weekly payroll documentation for prime and subcontractors will be required from start to finish of this contract showing compliance with prevailing wage rates. Lien Waivers from materials suppliers shall also be provided. Additional documents shall be furnished as required by other provisions in the bid package.
- 9.0 Payment shall be made per contractor invoice upon satisfactory completion of all work items and the receipt of required documentation

#### **M. Other Contractual Requirements:**

- 1.0 **RSMo 285.530** - The contractor understands and agrees that by entering into a contractual agreement with MoDOT, they certify the following:
  - a. The contractor shall only utilize personnel authorized to work in the United States in accordance with applicable federal and state laws. This includes, but is not limited to, the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) and INA Section 274A.
  - b. If the contractor is found to be in violation of this requirement or the applicable state, federal and local laws and regulations, and if the State of Missouri has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States, the state shall have the right to cancel the contract immediately without penalty or recourse and suspend or debar the contractor from doing business with the state.
  - c. The contractor agrees to fully cooperate with any audit or investigation from federal, state or local law enforcement agencies.
  - d. In addition, the contractor shall maintain enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services included herein.

2.0 Prevailing Wage:

- a. **General Wage Order # 56 , to apply St. Louis City, MO;**

3.0 Construction Safety Program:

Missouri law, 292.675 RSMo, requires the awarded Contractor and its subcontractor(s) to provide a ten-hour occupational safety and health administration (OSHA) construction safety program (or a similar program approved by the Missouri Department of Labor and Industrial Relations as a qualified substitute) for their on-site employees (laborers, workmen, drivers, equipment operators, and craftsmen) who have not previously completed such a program and are directly engaged in actual construction of the improvement (or working at a nearby or adjacent facility used for construction of the improvement). The Contractor and its subcontractor(s) shall require all such employees to complete this ten-hour program, pursuant to 292.675 RSMo, unless they hold documentation on their prior completion of said program. Penalties for non-compliance include Contractor forfeiture to the Commission in the amount of \$2,500, plus \$100 per contractor and subcontractor employee for each calendar day such employee is employed beyond the elapsed time period for required program completion under 292.675 RSMo.

### 3.0

### BID SUBMISSION

#### Bid Submission Information:

3.1.1 Submit completed Contractor Questionnaire with attachments not later than seven (7) days prior to the date and hour of the bid opening. See Sec 102.2 of the Missouri Standard Specifications for Highway Construction, and Rule 7 CSR 10-15.900, "Prequalifications to Bid of Certain Contractors". Questionnaire and Contact information are provided on MoDOT's website at: <http://www.modot.org/business/BecomeAMoDOTPrimeContractor.htm>

3.1.2 All bids must be received in a sealed envelope clearly marked **"SL13-037-RW "Retaining Wall Repair"**.

3.1.3 All bids must be received at the following address no later than **November 19, 2012 at 10:00 a.m., Local Time.**

The Missouri Department of Transportation  
Procurement Division  
Attn: Teresa (Terri Mount)  
2309 Barrett Station Rd.  
Ballwin, MO. 63021

3.1.4 The bidder may withdraw, modify or correct his bid after it has been deposited with the Department provided such request is submitted in writing and received at the location designated for the bid opening prior to the time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the time specified for the opening of bids.

3.1.5 Open Competition / Request For Bid Document:

- a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.
- b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
- c. Bidders are cautioned that the only official position of the MoDOT is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
- d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.

3.1.6 Pursuant to 285.530 RSMo, the bidder must affirm enrollment and participation in a federal work authorization program with respect to the employees proposed to work in connection with the services requested herein by:

- a. Submitting a completed Signature and Identity of Bidder form, attached herein,
- b. Submitting a completed, notarized copy of the applicable portion of Exhibit A, WORKER ELIGIBILITY VERIFICATION AFFIDAVIT **or** APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP, and

3.1.7 Proposal/Bid Guaranty/Contract Bond:

- a. Each bid shall be accompanied by a Bid Bond, Certified Check, Cashier's Check or Bank Money Order payable to the Director of Revenue – Credit State Road Fund for an amount equal to Five Percent (5%) of the amount of the BID submitted. This is to act as a guarantee that the bidder, if awarded the contract, will furnish an acceptable performance and payment bond (Contract Bond) or a cashier's check, a bank money order or a certified check made payable to "Director of Revenue--Credit State Road Fund" in an amount equal to One Hundred (100%) of the contract price.
- b. If a BID BOND is used (in lieu of a certified check, cashier's check, or bank money order), it must be in the form provided and executed by the bidder as principal and by a surety company authorized to do business in the MoDOT as surety. The agent executing the same on behalf of the surety company must attach a current Power of Attorney setting forth his authority to execute the bond involved.
- c. Certified Checks, Cashier's Checks or Bank Money Orders of unsuccessful bidders will be returned as soon as the award is made. The checks or bank money orders of the successful bidder(s) will be retained until the contract is executed and a satisfactory Performance and Payment (Contract Bond) is furnished. Bid Bonds will not be returned except on specific request of the bidder.

3.1.8 Bids will be reviewed to determine if the bid complies with the mandatory requirements, and to determine the lowest and best responsible bid.

3.1.9 Cost Determination - The low bid shall be determined by adding all of the firm, fixed prices on the pricing page for the original contract period to obtain a total price.

3.1.10 Contract Award – The contract will be awarded to the lowest responsible bidder determined as specified above.

- a. Award of this bid will be made on an “All Or Nothing” basis using the “lowest and best responsible” principle of award.
- b. Notification of award will be at the time the tabulation is posted to the Internet. It is the sole responsibility for all bidders to check the website for bid results

**4. PRICING PAGE SL13-037-RW**

4.1 The bidder shall provide a firm, fixed price in the table below for the original contract period and a maximum price for each potential renewal period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below.

Item #	Description	QTY	U/M	UNIT COST
001	Soil Nail Wall System	1	Lump Sum	

**COMPANY:** \_\_\_\_\_ **DATE;** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

**PRINTED NAME/ TITLE:** \_\_\_\_\_

## **Attachment I**

### **Contractor Qualifications**

Per Section I section 2.0

1. Indicate at least 3 completed projects over the past three years per section referenced above:
2. Provide qualifications of personnel assigned to this project per section referenced above:  
(Attach additional pages if necessary)

**Signature/ Title**\_\_\_\_\_ **Date:**\_\_\_\_\_

## **Attachment II**

### **SIGNATURE AND IDENTITY OF BIDDER**

The undersigned states that the correct LEGAL NAME and ADDRESS of (1) the individual Bidder, (2) each partner or joint venture (whether individuals or corporations, and whether doing business under a fictitious name), or (3) the corporation (with the state in which it is incorporated) are shown below; that (if not signing with the intention of binding himself to become the responsible and sole contractor) he is the agent of, and duly authorized in writing to sign for the Bidder or Bidders; and that he is signing and executing this (as indicated in the proper spaces below) as the proposal of a

( ) sole individual

( ) partnership

( ) joint venture

( ) corporation, incorporated under laws of state of \_\_\_\_\_

Dated \_\_\_\_\_.

Name of individual, all partners,  
or joint ventures:

Address of each:

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doing business under the name of:

Address of principal place of business in Missouri

(If using a fictitious name, show  
this name above in addition  
to legal names)

(If a corporation, show its name above)

ATTEST: (SEAL)

Secretary

Title

(NOTE: If the Bidder is doing business under a FICTITIOUS NAME, the Proposal shall be executed in the legal name of the individual, partners, joint ventures, or corporation, with the legal address shown, and REGISTRATION OF FICTITIOUS NAME filed with the Secretary of

State, as required by Sections 417.200 to 417.230, RS Mo. If the Bidder is a CORPORATION NOT ORGANIZED UNDER THE LAWS OF MISSOURI, it shall procure a CERTIFICATE OF AUTHORITY TO DO BUSINESS IN MISSOURI, as required by Section 351.570 and following, RS Mo. A CERTIFIED COPY of such Registration of Fictitious Name or Certificate of Authority to do Business in Missouri shall be filed with the Missouri Highways and Transportation Commission, as required by the Standard specifications, Sec 102.6.6 and.



**Attachment III**  
**WORKER ELIGIBILITY VERIFICATION AFFIDAVIT FOR ALL**  
**MHTC/MODOT CONTRACT AGREEMENTS IN EXCESS OF \$5,000**  
(for joint ventures, a separate affidavit is required for each business entity)

STATE OF \_\_\_\_\_ )  
 ) ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be a person whose name is subscribed to this affidavit, who being by me duly sworn, deposed as follows:

My name is \_\_\_\_\_, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 285.530, RSMo, to enter into any contract agreement with the state to perform any job, task, employment, labor, personal services, or any other activity for which compensation is provided, expected, or due, including but not limited to all activities conducted by business entities:

I am the \_\_\_\_\_ of \_\_\_\_\_, and I am duly authorized, directed, and/or empowered to act officially and properly on behalf of this business entity. I hereby affirm and warrant that the aforementioned business entity is enrolled in a federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, and the aforementioned business entity shall participate in said program with respect to all employees working in connection to work under the within state contract agreement with the Missouri Highways and Transportation Commission (MHTC). I have attached documentation to this affidavit to evidence enrollment/participation by the aforementioned business entity in a federal work authorization program, as required by Section 285.530, RSMo. In addition, I hereby affirm and warrant that the aforementioned business entity does not and shall not knowingly employ, in connection to work under the within state contract agreement with MHTC, any alien who does not have the legal right or authorization under federal law to work in the United States, as defined in 8 U.S.C. § 1324a(h)(3). I am aware and recognize that, unless certain contract and affidavit conditions are satisfied pursuant to Section 285.530, RSMo, the aforementioned business entity may be held liable under Sections 285.525 through 285.550, RSMo, for subcontractors that knowingly employ or continue to employ any unauthorized alien to work within the state of Missouri.

I acknowledge that I am signing this affidavit as a free act and deed of the aforementioned business entity and not under duress.

\_\_\_\_\_  
Affiant Signature

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires:

***[documentation of enrollment/participation in a federal work authorization program attached]***

**APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP**  
(a separate affidavit is required for each owner and general partner) *(if applicable)*

STATE OF \_\_\_\_\_ )  
 ) ss

COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instruments, who being by me duly sworn, deposed as follows:

***My name is \_\_\_\_\_, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 208.009, RSMo, for failure to provide affirmative proof of lawful presence in the United States of America:***

☐ I am the \_\_\_\_\_ of \_\_\_\_\_, which is applying for a public benefit (grant, contract, and/or loan) administered/provided by the Missouri Highways and Transportation Commission (MHTC), acting by and through the Missouri Department of Transportation (MoDOT). I am classified by the United States of America as: (check the applicable box) a United States citizen. an alien lawfully admitted for permanent residence.

I am aware that Missouri law provides that any person who obtains any public benefit by means of a willfully false statement or representation, or by willful concealment or failure to report any fact or event required to be reported, or by other fraudulent device, shall be guilty of the crime of stealing pursuant to Section 570.030, RSMo, which is a Class C felony for stolen public benefits valued between \$500 and \$25,000 (punishable by a term of imprisonment not to exceed 7 years and/or a fine not more than \$5,000 – Sections 558.011 and 560.011, RSMo), and is a Class B felony for stolen public benefits valued at \$25,000 or more (punishable by a term of imprisonment not less than 5 years and not to exceed 15 years – Section 558.011, RSMo).

I recognize that, upon proper submission of this sworn affidavit, I will only be eligible for temporary public benefits until such time as my lawful presence in the United States is determined, or as otherwise provided by Section 208.009, RSMo.

I understand that Missouri law requires MHTC/MoDOT to provide assistance in obtaining appropriate documentation to prove citizenship or lawful presence in the United States, and I agree to submit any requests for such assistance to MHTC/MoDOT in writing.

I acknowledge that I am signing this affidavit as a free act and deed and not under duress.

\_\_\_\_\_  
Affiant Signature

\_\_\_\_\_  
Affiant's Social Security Number or  
Applicable Federal Identification Number

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires:

**Attachment IV SL13-037-RW**

(Revised 08/96)

**BID BOND**

KNOW ALL PERSONS BY THESE PRESENTS, that we \_\_\_\_\_

\_\_\_\_\_ as principal and \_\_\_\_\_

as surety, are held and firmly bound unto the state of Missouri (acting by and through the Missouri Highways and Transportation Commission) in the penal sum of \_\_\_\_\_

Dollars (\$ ) to be paid to the commission to be credited to the state road fund, the principal and surety binding themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this \_\_\_\_\_

THE CONDITION OF THIS OBLIGATION is such that

WHEREAS the principal is submitting herewith a bid to the commission on route(s) \_\_\_\_\_

\_\_\_\_\_ in County(ies),

project (s) \_\_\_\_\_

\_\_\_\_\_ for construction or improvement of state highway as set out in said bid;

NOW THEREFORE, if the commission shall accept the bid of the principal and if the principal shall properly execute and deliver to the commission the contract, contract bond, and evidence of insurance coverage in compliance with the requirements of the bid, the specifications, and the provisions of section 227.100 RSMo, to the satisfaction of the commission, then this obligation shall be void and of no effect, otherwise to remain in full force and effect.

In the event the said principal shall, in the judgment of the commission, fail to comply with any requirement as set forth in the preceding paragraph, then the state of Missouri, acting by and through the commission, shall immediately and forthwith be entitled to recover the full penal sum above set out, together with court costs, attorney's fees, and any other expense of recovery.

The principal and surety hereby certify that the document is the original or a verbatim copy of the bid bond form furnished by the Commission, in accordance with Sec 102.9 of the Missouri Standard Specifications for Highway Construction.

\_\_\_\_\_  
Principal

SEAL By \_\_\_\_\_

Signature

\_\_\_\_\_  
Surety

SEAL By \_\_\_\_\_

Signature of Attorney in Fact

NOTE: This bond must be executed by the principal, and by a corporate surety authorized to conduct surety business in the state of Missouri.

# VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

## Vendor Information

All bidders must furnish **ALL** applicable information requested below

<b>Vendor Name/Mailing Address:</b>   Email Address:	<b>Vendor Contact Information (including area codes):</b>  Phone #:  Cellular #:  Fax #:  
<b>Printed Name of Responsible Officer or Employee:</b>	<b>Signature:</b>
<b>For Corporations</b> - State in which incorporated:	<b>For Others</b> - State of domicile:
If the address listed in the Vendor Name/Mailing Address block above is not located in the State of Missouri, list the address of Missouri offices or places of business:  <i>If additional space is required, please attach an additional sheet and identify it as <b><u>Addresses of Missouri Offices or Places of Business.</u></b></i>	
<b>M/WBE INFORMATION:</b> List all certified Minority or Women Business Enterprises ( <b><u>M/WBE</u></b> ) utilized in the fulfillment of this bid. Include <u>percentages</u> for subcontractors and identify the M/WBE certifying agency: <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 33%;"><u>M/WBE Name</u></div> <div style="width: 33%;"><u>Percentage of Contract</u></div> <div style="width: 33%;"><u>M/WBE Certifying Agency</u></div> </div> <div style="margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 33%;"></div> <div style="border-bottom: 1px solid black; width: 33%;"></div> <div style="border-bottom: 1px solid black; width: 33%;"></div> </div>	
<i>If additional space is required, please attach an additional sheet and identify it as <b><u>M/WBE Information</u></b></i>	

## Preference Certification

**GOODS/PRODUCTS MANUFACTURED OR PRODUCED IN USA:** If any or all of the goods or products offered in the attached bid which the bidder proposes to supply to the MHTC are **not** manufactured or produced in the "United States", or imported in accordance with a qualifying treaty, law, agreement, or regulation, list below, by item or item number, the country other than the United States where each good or product is manufactured or produced.

Item (or item number)	Location Where Item is Manufactured or Produced

*If additional space is required, please attach an additional sheet and identify it as **Location Products are Manufactured or Produced**.*

**MISSOURI SERVICE-DISABLED VETERAN BUSINESS:** Please complete the following if applicable. Additional information may be requested if preference is applicable. See below definitions for qualification criteria:

**Service-Disabled Veteran** is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

**Service-Disabled Veteran Business** is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

Veteran Information

Business Information

Service-Disabled Veteran's Name (Please Print)

Service-Disabled Veteran Business Name

Service-Disabled Veteran's Signature

Missouri Address of Service Disabled Veteran Business

## **STANDARD SOLICITATION PROVISIONS**

- a. The solicitation for the procurement of the supplies referenced therein, to which these "Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions" are attached, is being issued under, and governed by, the provisions of Title 7 – Missouri Department of Transportation, Division 10 – Missouri Highways and Transportation Commission, Chapter 11 – Procurement of Supplies, of the Code of State Regulations. The Missouri Highways and Transportation Commission (**MHTC**), acting by and through its operating arm, the Missouri Department of Transportation (**MoDOT**), draws the Bidder's attention to said 7 CSR 10-11 for all the provisions governing solicitation and receipt of bids/quotes and the award of the contract pursuant to this solicitation.
- b. All bids/quotes must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.

## **GENERAL TERMS AND CONDITIONS**

### **Definitions**

Capitalized terms as well as other terms used but not defined herein shall have the meaning assigned to them in section 7 CSR 10-11.010 Definition of Terms.

### **Nondiscrimination**

- a. The Contractor shall comply with all state and federal statutes applicable to the Contractor relating to nondiscrimination, including, but not limited to, Chapter 213, RSMo; Title VI and Title VII of Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 2000e, *et seq.*); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101, *et seq.*).
- b. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MHTC shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
  - ii. cancellation, termination or suspension of the contract, in whole or in part.

### **Contract/Purchase Order**

- a. By submitting a bid/quote, the Bidder agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's bid response, and (3) the MHTC's acceptance of the bid by post-award contract or purchase order.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized notice to proceed and/or purchase order.

### **Applicable Laws and Regulations**

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri, Missouri Department of Revenue, and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MHTC a copy of their current Authority Certificate from the Secretary of State of the State of Missouri and/or a copy of their Certificate of No Tax Due from the Missouri Department of Revenue.
- c. Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MHTC a copy of their current Transient Employer Certificate from the Missouri Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.

### **Executive Order:**

The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6<sup>th</sup>) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.

- 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
- 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
- 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

### **Preferences**

**In the evaluation of bids/quotes, preferences shall be applied in accordance with 7 CSR 10-11.020(7). Contractors should apply the same Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.**

### **Cancellation of Contract**

The MHTC may cancel the Contract at any time for a material breach of contractual obligations or for convenience by providing Contractor with written

notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.

#### **Bankruptcy or Insolvency**

Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntarily, or upon the appointment of a receiver, trustee, or assignee, for the benefit of creditors, the Commission reserves the right and sole discretion to either cancel the Agreement or affirm the Agreement and hold the Contractor responsible for damages.

#### **Warranty**

The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by the MHTC, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

#### **Status of Independent Contractor**

The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

#### **Non-Waiver**

If one of the parties agrees to waive its right to enforce any term of this Contract, that party does not waive its right to enforce such term at any other time or to enforce any or all other terms of this Contract.

#### **Indemnification**

The Contractor shall defend, indemnify and hold harmless MHTC, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Contractor's performance of its obligations under the contract awarded pursuant to this solicitation.

#### **SPECIAL TERMS AND CONDITIONS**

#### **Permits, Licenses and Safety Issues**

*The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to state agencies.*

#### **Delivery – Additional Requirements**

- a. The Contractor shall furnish the Missouri Department of Transportation with a planned delivery schedule at least 16 hours before starting delivery.
  - 1) Notification should be during the normal workday preceding the day on which the Contractor desires to initiate delivery.
  - 2) It will be necessary for a representative of the Missouri Department of Transportation to be present when the material is delivered.
  - 3) No material will be accepted that has been dumped in the absence of the department's aggregate materials checker.
- a. Unless otherwise specified in the proposal, deliveries will be a minimum of **500 Tons Per Day**. No deliveries will be made during the period from **30 minutes before sundown to sunrise**. No deliveries will be made on **Saturdays, Sundays and holidays** unless specifically authorized by the engineer.
- b. The following days shall be construed as **official holidays** under the terms of the contract:

January 1	New Year's Day
Third Monday in January	Martin Luther King, Jr.'s Birthday
February 12	Lincoln's Birthday
Third Monday in February	Washington's Birthday
May 8	Truman's Birthday
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day

- c. When any of the above **holidays falls** on a **Sunday**, the holiday will be observed on the following **Monday**; when any of the above **holidays falls** on a **Saturday**, the **holiday** will be observed on the immediately preceding **Friday**.
- d. Contractor will not be required to provide dozers, loaders, motor graders, or other equipment for shaping of stockpiles, constructing ramps or runways, or leveling of the top of a completed lift, unless otherwise noted herein.

#### **Temporary Suspension of Work**

- a. The **District Engineer** shall have authority to suspend work wholly or in part for such period or periods as may be deemed necessary when weather or

other conditions are such that in the opinion of the engineer, the work may be done at a later time with advantage to MoDOT or for failure on the part of the Contractor to comply with any of the provisions of the Contract.

- b. If MoDOT suspends the work for its own advantages and not because of the Contractor's failure to comply with the Contract, the Contractor will be allowed an equal number of calendar days after the completion date for the completion of the work. MoDOT may at its discretion give the Contractor an extension of time for completing the work where the Contractor incurs delays for causes beyond his control.
- c. Normal rainfall is not considered a cause qualifying for an extension of time. Claim for extension of time for all causes must be submitted by the Contractor in writing within **30 Days** after the claimed cause for the delay has ceased to exist.

#### **Preferences**

- a. By virtue of statutory authority, RSMo. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
  - 1) If attached, the document entitled **"PREFERENCE IN PURCHASING PRODUCTS"** should be completed and returned with the solicitation documents.
  - 2) If attached, the document entitled **"MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT"** should be completed and returned with the solicitation documents. **Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more.**
- b. By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable. 1) If attached, the document entitled **"MISSOURI SERVICE-DISABLED VETERAN PREFERENCE"** should be completed and returned with the solicitation documents.